Chapter - II

2.1. Introduction:

This Chapter includes the review of those works and studies which are directly or indirectly related to the present study. Doing this we can learn about what others have done in the same area, develop an insight into the problem under investigation and to give a proper dimension to the study. The present study focuses mainly on the identification of the poor along with its two aspects, viz., inclusion error and exclusion error. It also assesses the relative significance of various factors on the poverty estimation. A vast empirical literature exists in these two aspects of the identification of the poor. From various sources like journals, books, encyclopedia, theses and dissertations, information regarding the present topic have been collected and below is an attempted to systematically present the review of literature.

2.2. Review of Literature:

Smith (1776) defined Poverty as "the inability to purchase necessities required by nature or custom". In this definition, the social/ psychological status aspect of poverty receives implicitly the same weight as the material, purely economic condition (nature). He further elaborated on this definition by clarifying the type of necessities required to be considered as non-poor: "by necessaries I understand not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders indecent for creditable people, even of the lowest order, to be without."

Rowntree (1901) had used the concept of subsistence poverty to define the concept of poverty. He drew a poverty line in terms of minimum weekly sum of money which was necessary to enable the families to secure the necessaries of a healthy life. The money needed for this subsistence level existence covered fuel and light, rent, food clothing, household and personal sundries and was adjusted to family size. He distinguished between primary and secondary poverty. He understood primary poverty as "earnings insufficient to obtain the minimum necessaries for the maintenance of merely physical efficiency." To his mind, the concept of secondary poverty was based on the more subjective judgment of whether the people he interviewed were "in obvious need and squalor", despite lying above the poverty line he delineated. He argued primary poverty was where the family lacked the earnings sufficient to obtain even the minimum necessities whereas families suffering from secondary poverty had earnings that were sufficient but were spending some of that money on other things.

He conducted the study on over two third of the population of York, around 46,754 individuals or 11,560 families surveyed. The study revealed that about 20,000 individuals were living in poverty. He defined poverty line in terms of minimum weekly sum of money "necessary to enable families to secure the necessities of a healthy life." About 27.84% of York's population was living in the most serious poverty or absolute poverty. Under absolute poverty, individuals were unable to acquire even basic necessities, such as, food, fuel and clothing. It was discovered that there were two chief reasons for such poverty. Firstly in 25% of the cases, individuals or families were impoverished as a result of a lack of income, on account of the chief

wage-earner being dead, disabled or otherwise unable to work. However, in around 50% of cases, the chief wage-earner was employed in regular work, but paid mere meager amount, unable to sustain a healthy level of living. In the remaining cases, income was satisfactory to purchase necessities, but the spending of it was often "unwise" or simply unnecessary. Importantly the study revealed that poverty in Britain was widespread and not simply confined to the extensive urban metropolis of London.

Dandekar & Rath (1971) made an attempt to link calorie norm to poverty line and pointed out that daily intake of 2250 calories per person could be considered as adequate under the Indian conditions both in rural and urban areas. They suggested that somewhat lower minimum for rural population, i.e., Rs. 180 per capita per annum and a somewhat higher minimum Rs. 270 per capita per annum for the urban population at 1960-61 prices. In their study, they estimated the incidence of poverty on the basis of minimum nutritional needs from the NSS Consumer expenditure data of 1960-61 and found that about 48 per cent of Assam's population was living below the poverty line (BPL). The extent of poverty in Assam aggravated during 1970-71. During that period, the price level in Assam was about 20 per cent higher than that of all India level. Thus, the cut-off norms of poverty line, which was estimated at Rs. 40 for all India level, correspondingly became Rs. 48 at Assam's prices. Taking Rs. 48 as the cut-off norms of poverty line, the number of persons living below poverty line became 112.65 lakhs (73.67 %), out of which 5.53 lakhs (22.62%) lived in urban areas and the rest of 107.12 lakhs (77.38%) lived in the rural areas of the state.

Dutta (1978) studied the changes in poverty and the distribution of income of the poor in rural India between the year 1968-69 and 1973-74. He took Rs. 15 per capita per month, at 1960-61 prices as "the poverty line". He was concerned not

merely with the number of the poor but also with the distribution of income among the poor. Based on NSS consumption data for the rural poor, he had constructed estimates of Ps (Sen's Poverty Index) for four years between 1968-69 and 1973-74. The study showed a reduction of poverty (according to Ps) of 12.52% and 22.5% respectively between 1968-1969 and 1973-1974. The proportion of people BPL had also declined, although by a smaller magnitude. These figures tend to go against the popular belief that poverty in rural India had been increasing. He mentioned that this analysis had been aggregative and the optimistic results reported here would not contradict the possibility that there had been an increase in poverty in some states or regions during the period under observation.

Townsend (1979) defines poverty as "the lack of the resources necessary to permit participation in the activities, customs and diets commonly approved by society". According to him, the flow of resources accruing to individuals is governed by a set of different systems operating for each of them. Poverty is in part the outcome of the combination of these systems at work. Some systems, such as, the wage and social security systems, affect larger shares of the population than others.

In the study of *Sen (1979)*, it is observed that the measurement of poverty could be split into two distinct operations, viz., identification (who are the poor?) and aggregation (how are the poverty characteristics of different people to be combined into an aggregate measure?) In the exercise of identifying the poor, it was possible to use at least two alternative methods, viz., the direct method and the income method. The direct method identified those whose actual consumption failed to meet the accepted conventions of minimum needs while the income method was after spotting those who did not have the ability to meet these needs within the behaviourable constraints typical in that community. However, they were not only the two ways of

measuring the "same" thing, but they reflect two different conceptions of poverty. Because of variations of family size, economics of large size in family consumption and age specificity of needs, the problem of converting families into equivalent adult numbers involved serious difficulties. But alternative approaches could be considered, providing different bases for deriving equivalence of needs. There was the further problem of weighting of families of different size in the aggregation exercise. An axiomatization of the aggregation exercise using notions of absolute and relative deprivation led to a poverty measure P. The axioms used for deriving the measure P could be varied, yielding other poverty measures, e.g., P to P₆. An analysis of the rationale of these variants indicated what they were trying to capture vis-à-vis what was represented by the poverty measure P.

Dandekar (1981) had mentioned four criterions for identifying poor. These are: the proportion of expenditure taken up by specified essential items, such as, food; calorie value of food; cost of a balanced diet and finally cost of essentials of tolerable human existence. However, he compared only the total expenditure with the cut-off expenditure level identified and said that all households with expenditure less than the cut-off expenditure are poor. He also dealt with the criticism leveled by V.K.R.V. Rao and Sukhatme against the estimate of poverty which he had presented in his book "Poverty in India". He argued that Rao's criticism was based on confusion between two related but separate phenomenon, viz., poverty and under-nutrition and that Rao gets the "paradoxical" result because he used the terms "poor" and "non-poor" in two different senses without seeing the difference. According to him, the same confusion between poverty and under nutrition underlines P.V. Sukhatme's criticism.

Sen (1983) states, "absolute deprivation in terms of a person's capabilities relates to relative deprivation in terms of commodities, income and resources." Sen

envisages a fixed set of capabilities that every human being should be able to exercise for not being considered poor. The idea is that in order to fulfill this requirement, the level of material needs / resources necessary to develop these capabilities may change over time and across societies. Thus, poverty is context dependent on the means to end it, but it is not context dependent on the non-material goals. In Sen's own words, "Poverty is an absolute notion in the space of capabilities but very often it will take a relative form in the space of commodities or characteristics."

Hagenaars and Vos (1988) used eight different definitions of poverty to determine who is poor. These definitions are: Basic Needs definition, Food Ratio definition, Fixed Cost definition, Total Expenditure definition, Durables Index definition, Minimum food definition and Official definition.

According to them, the basic needs approach defines the absolute minimum needs in terms of "basic need", such as, food, clothing and housing. It requires the assessment of a minimum amount necessary to meet each of these needs. These amounts are added up to arrive at a poverty line in terms of income. Secondly, Food/ Income Ratio definition is based on the Engel law which states the ratio of food expenditures to income declines when income increases. Thirdly, according to Fixed Cost / Income Ratio definition, many low income households have experienced such an increase in their fixed cost, i.e., cost of housing, municipal levies, energy, telephone, educational expenditures etc. that even with fixed levels of income or social benefits their net disposable income has decreased significantly. Fourthly, Total Expenditure / Income Ratio definition states that a person is poor if his total expenditure cannot be paid for out of current income, i.e., if he borrows money or spends savings in order to get along. According to Durables Index definitions, households are poor when they are lacking certain commodities that are common in

the society they are living in. "Just Sufficient" Income definition states that if households' actual income level is less than the amount they consider to be "Just Sufficient", they are said to be poor. Seventhly, in the Minimum Food definition, by comparing the actual amount spent on food by this household to this subjective minimum, we may categorize the household as poor or non-poor. Finally, if the actual household income is lower than or equal to the amount households receive when they are on social assistance, we deduct that people are poor according to the Official definition.

The purpose of *Catenese's* (1991) paper is to share a modest attempt to identify the Less Developed Countries' (LDCs) poor at the household level. He conducted a study in rural Haiti, Africa in 1988. In this study, he used sequential criteria approach which are: (i) If all households members sleep on dirt floor mats; (ii) If at least one household member sleeps on a bed, then the household must be headed by a female for the household to be considered poor; (iii) If at least one household member sleeps on a bed and the household head is male, then the kitchen must not be a separate structure in the compound for the household to be considered poor ; (iv) If at least one household member sleeps on a bed, there is a male head of household and the kitchen is a separate structure in the compound, then the male head of household must have a disability for the household to be considered poor; (v) If at least one household member sleeps on a bed, there is a male head of household, the kitchen is a separate structure in the compound, the male head of household does not have a disability, then the household head must be a sharecropper for the household to be considered poor; (vi) If at least one household member sleeps on a bed, there is a male head of household, the kitchen is a separate structure in the compound, the male head of household does not have a disability, and the household head does not

sharecrop, then the household head must do agricultural labour for a wage for the household to be considered poor.

Cornia and Stewert (1993) examined in detail the two types of targeting errors that occur in food and nutrition interventions. Errors of wrong exclusion (Type I errors) refer to the exclusion of genuinely poor or deserving households from a programme. They were termed "F-mistakes" by Cornia and Stewert on account of the failure to reach the target population. Errors of wrong inclusion (Type II errors) refer to the inclusion of non-eligible persons or households in a programme. They were termed "E-mistakes", i.e., mistakes of excessive coverage. They demonstrated, countries, that a shift from universal coverage to targeted programmes increased errors of exclusion while lowering errors of inclusion. They suggested if F-mistakes rise and E-mistakes fall when targeting is introduced, then an evaluation of the errors be measured and that appropriate weights are assigned to them. They also showed that incorporating both types of mistakes could alter the rankings of food interventions, compared with the more usual focus on E-errors alone. Empirical estimates suggested that the efficiency cost element of F-mistakes could be substantial.

Kakwani (1993) considered the problem of statistical inference with estimated poverty measures. His main aim was to provide distribution free asymptotic confidence interval and statistical inference for additive poverty indices. He applied his developed methodology to the data obtained from the Cote d'Ivoive Living Standards Survey. In this survey, he had used per capita adjusted consumption as a measure of household economic welfare. He considered two poverty lines: one with adjusted per capita consumption of 91.39 and another of 162.61 per year. He also considered two household groups, viz., female headed household and male headed

households. The study showed that the value of t' are considerably larger than 1.96 which leads to the conclusion that a large degree of poverty existed in Cote d'Ivoire. However, an important observation to be made was that the numerical values of 't' differ considerably for different poverty measures, viz., head count ratio, poverty gap ratio, Watts measure, FGT measures etc. Among all the poverty measures, the head count ratio gives the smallest confidence interval relative to its value. The study also revealed that the mean consumption of the two household groups was statistically significant. All the poverty measure showed that poverty was significantly higher among male headed households. The adjusted per capita consumption was almost identified in the two nationalities of households, viz., Ivorians and others. Among Ivorians 28.38% of the population was poor as against 24.04% among other nationalities. These differences are statistically insignificant at the 5% level. But the other poverty line showed that poverty among Ivorians was significantly higher than that among other nationalities. These conflicting conclusions emerged because the head count ratio was insensitive to the poverty gap and the distribution of income among the poor. Thus, the poverty analysis based on head count ratio could lead to the misleading conclusion that the two groups have the same poverty level. Some poverty measures may show significant difference in poverty while other may show insignificant differences. So, an appropriate measure should be selected before embarking on the analysis of poverty differences between populations.

The Copenhagen Declaration of the United Nations (1995) states that poverty includes "lack of income and productive resources to ensure sustainable livelihoods ; hunger and malnutrition ; ill health ; limited or lack of access to education and other basic services ; increased morbidity and mortality from illness ; homelessness and inadequate housing ; unsafe environments and social discrimination and exclusion. It is also characterized by lack of participation in decision making and in civil, social and cultural life."

Suryanarayan (1996) emphasized the importance of the data base in any discussion of poverty and identified the major data gaps for policy studies. Beginning with the primary question of identification of the poor based on a measure of standard of living and minimum norm till the final stage of policy prescription, an awareness of the data base and the constraints it imposes on interpretations, etc. is quite important. He threw light on some such issues ignored in studies for India. It is noted that the conventional approaches to poverty identification and measurement presuppose a stationary economy. In a developing economy subject to changes in institutional parameters involving increasing commercialization of product markets and increasing casualisation of labour markets as experienced by India in recent years, a conventional approach based on narrow data base and concepts could yield misleading results and policy prescriptions. Therefore, there is a need for an integrated approach for a comprehensive analysis.

United Nations (1998) defines "Fundamentally, poverty is a denial of choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerless and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living on marginal or fragile environments, without access to clean water or sanitation."

Ravallion (1998) defined poverty line as the monetary cost to a given person at a given place and time of a reference level of welfare. People who do not attain that level of welfare are deemed poor and those who do attain are not. He has used four sets of indicators to measure poverty, viz., the distribution of real expenditure per single adult, covering all market goods and services ; Indicators of access to nonmarket goods for which measuring full prices cannot be assigned, such as, access to non-market education and health service ; Indicator of distribution within households, measures of gender disparities and child nutritional status ; Indicators of certain personal characteristics which entail unusual constraints on the ability of escape poverty such as physical handicap etc.

Sadeghi et al (1998) attempted to analyze the income distribution and the determinants of poverty in rural areas in Iran, for which the Savjbolagh Township located in the north of Iran, was selected as a representative. The study utilized farm and household cross-sectional data for 1998-99 that was collected through personal interviews with 350 farmers from Savejbolagh Township, who were selected by stratified random sampling. The study showed that the quantity of all of the three types of assets – cropland, fruit land, and livestock units – generally increase as they moved from the poorest income decile to the richest decile. The ratios of the income of the richest decile to the poorest decile for the low land district, upland district and Entire Township are 9.9, 58.6 and 31.5 respectively. The income distribution among the upland farmers with lower average income was worse than that for lowland farmers. This is consistent with other research results in which the distribution of income is worse in poor population. The percentage of farmers who used machines for harvesting wheat and barley increases as the farm income increases. A general decrease in town distance was observed as they moved from the poorest to the richest deciles. However, for the number of sons, who live with the family, as slight positive

correlation with the level of income was observed. It is interesting that the upland farmers who had low income were less illiterate (23.8%) than the low land farmer.

The estimated co-efficient showed statistically significant positive effects of cropland, fruit land, livestock units and town distance for both districts. The number of sons living with the family and technology had statistically significant positive effects on income in the upland district but not in the low land. Age, experience and the level of the education of the farmers did not show statistically significant effects on the level of income. The results implied that in both districts of the Savejolagh Township, the level of income could increase mainly due to cropland, fruit land and livestock. It can be concluded that given the current technologies, type of education and other circumstances, the alleviation of poverty and income disparities can be achieved by improvements in the assets of the poor farmers. Infrastructural improvement, such as, better roads and communication facilities can also decline poverty especially for the upland district that suffers from low quality roads and communication facilities.

The Millennium Development Goals (MDGs) (2000) have been widely accepted as yardstick for measuring development process across countries. One interesting point is that out of the total eight MDGs, four relate to poverty, hunger and health, these are – (i) eradicate extreme poverty and hunger; (ii) reduce child mortality; (iii) Improve maternal health; (iv) Combat HIV/AIDs, malaria and other diseases eradication of extreme poverty and hunger and improving the health of the poor are therefore the central issue on the international development agenda. Health is a very important economic asset, particularly for the poor people and it is considered as fundamental to the reduction of poverty and extreme hunger. In MDGs – recognition health is central to the global agenda of reducing poverty as well as important measure of human well-being.

Falkingham et al (2001) had stressed the identification of the poor for the purposes of monitoring the International Development Targets (IDTs). As such they primarily concentrated on the more narrow conceptions of material (or economic) poverty or well-being. The level of material poverty and the profile of the poor, found at any one time in any one country are critically dependent upon two criteria: -- how people are ranked in terms of welfare and the definition of the poverty line. There are two main approaches to constructing a poverty line. An absolute definition of poverty assumes it is possible to define a minimum standard of living based on a person's physiological needs for water, clothing and shelter - i.e. their basic needs. In contrast, the relative approach defines poverty in relation to a generally accepted standard of living in a specific society at a specific time and goes beyond basic physiological needs.

Swaminathan and Misra (2001) focused on costs arising out of the two types of targeting errors – errors of exclusion and errors of inclusion – in the system of public distribution of food in India or PDS. Using primary data from a village in Maharashtra, at two subsequent surveys, the authors showed that errors of wrong inclusion decreased while errors of wrong exclusion increased with a shift from universal to targeted coverage. They demonstrated the pitfalls of identifying a target group based on an income indicator.

Swaminathan conducted the first survey of Mohakal in November-December, 1995, and Misra re-surveyed the village in June-July, 2000 with a very similar questionnaire. Both surveys collected information on the quantities purchased from the PDS, the frequency of purchases over the reference year and reasons for purchase or non-purchase of food grains by households from the PDS. The survey of 1995 covered 109 households. At the time of the survey of 2000, there were 153 households in the village. The two surveys drew an important feature of change in the village and it is that the proportion of landless household has risen from 25% in 1995 to 31.4% in 2000. At the same time, there was decline in the proportion of household with holdings above 10 acres, from 6.5% in 1995 to 3.3% in 2000. There was also a rise in the proportion of household without any ownership of irrigated land. The proportion of household with very small ownership holdings of irrigated land increased over the reference period.

Using the lower cut off (Rs. 4000 per annum per family) level of income and data from the IRDP survey of 1992-93, the Maharashtra Government estimated 84 households in Mohakal were categorized as BPL. However, using, at first, a two steps procedure of expenditure method and later three criteria for exclusion from BPL category, in 1997-98, the Maharashtra Government identified only 25 households were deemed to be BPL in Mohakal which is less than one third of the estimate based on 1992-93 IRDP survey. For the limited purpose of estimating targeting errors, they defined a household as being in the target group if (i) it had either no ownership holdings of land or owned only un-irrigated holdings of land or owned only unirrigated land and (ii) it had no resident member who worked in regular salaried employment or trade or business. The calculation of errors is based on this definition of the target group. The study showed that in case of entitlements, F mistakes (error of wrong exclusion) rose sharply from 5.5% under universal coverage to 25.7% in the interim Targeted Public Distribution System (TPDS) and 54% in the final TPDS. While E mistakes (errors of wrong inclusion) fell from 34.8% under universal coverage to 10.1% in the interim TPDS and 2% in the final TPDS. In case of utilization, it is clear that F-mistakes were much higher than E- mistakes and the gap between them has widened significantly after the introduction of targeting. Thus, the survey concluded that priority must clearly be given to reducing F-mistakes and ensuring that all vulnerable households are included in the PDS.

Hirway (2003) showed that the new method of BPL survey (2002) did not seem to be adequate to identify the poor. He observed that the problem of targeting the poor was not just a statistical problem. The real problem was of identifying and reaching the poor for poverty alleviation programmes and schemes. In India, it is frequently difficult for the poor to come forward to claim these programmes on the one hand and for administration to reach these programmes to the poor on the other hand. He concluded that this problem could be solved through improved targeting by using innovative methods and redesigning the poverty reduction strategy by adding a new component of attacking the dependency of the poor to empower them and to claim their due share in economic development.

The study made by Hirway in Gujrat had presented some useful results in the context of poverty alleviation programmes. The study selected three talukas, one each from three different types of district, viz., Dahod (tribal district), Bharuch (arid or semi-arid) and Dhanera (irrigated region). Two villages were selected from each of the talukas for detailed investigation.

The result of the study was that the inclusion and exclusion errors exist in all types of villages. The study also revealed that errors of inclusion of non-poor households were larger than errors of exclusion of the poor. About 25-35% of rich households somehow managed to get into BPL lists, while 10-15% poor households were left out of BPL lists. However, the study pointed out that even inclusion in BPL lists did not guarantee access by the poor to poverty alleviation programmes due to

disapproval of the application of BPL households by the local administration and so on.

Sundaram (2003) revealed that most of the criticisms of the 1997 BPL census methodology are equally applicable to the methodology recommended for the 2002 BPL Census. The 2002 BPL Census Methodology is beset with a number of problems in terms of the list of indicators, the scoring pattern for individual indicator and the procedure of simple aggregation of scores on individual indicators. He found that a number of programmes addressing capabilities and deprivation should be universal in scope and hence should not be linked with any ranking of the households. However, the key wage employment programmes were expected to be there and largely they were self-targeting. They were focused on locations of need and not targeted at individual households. He also pointed out that the ranking on the aggregate score on 13 indicators was not practically needed or useless for the implementation, monitoring and evaluation of programmes like SGSY. For this Sundaram raised the fundamental question that if the recommended ranking of rural households on the aggregate score on 13 indicators was either not needed or useless, what was the utility of this BPL Census 2002 for the ministry of rural development? Why should the Govt. of India proceed blithely to implement these recommendations for the BPL Census 2002?

Bourguignon & Chakraborty (2003) developed an alternative way to take into account the multi-dimensionality of poverty which is to specify a poverty line for each dimension of poverty and to consider that a person is poor if he/she falls below at least one of these various lines. They explored how to combine these various poverty lines and associated one-dimensional gaps into multi-dimensional poverty measures. They stated that person i may be called poor with respect to attribute j if x_{ij} $< z_j$. Person i is regarded as rich if $x_{ij}>z_j$ for all j, where z be a vector of thresholds or "minimally acceptable levels".

They analyzed the evolution of multi-dimensional poverty in rural Brazil during the 1980s. Samples were being used from the PNAD households' survey for the years 1981 and 1987. Poverty is measured at the individual levels. It includes two dimensions, income on the one hand and educational attainment on the other hand. The income poverty threshold is 2 dollar a day, at 1985 ppp corrected prices. The educational poverty threshold is defined as the end of primary school, i.e., four years of schooling. At first, the level of poverty was measured by the one dimensional (P) measure separately for income and education. It was found that the income poverty increased from 1981 to 1987 whereas educational poverty fell. There were 40.5% of rural adults BPL in 1981 whereas 74.4% had not completed primary school. In 1987, there proportions were 42.1 and 68% respectively (P). Then, in the multi-dimensional case, the headcount corresponds to individuals who are poor either in terms of income or in terms of education. Accordingly, there were 79.7% poor in 1981 while 75.6% in 1987. From these figures, it is easy to derive the proportion of people who were poor in both dimensions. They were 35.2% in 1981 and 34.4% in 1987. Thus, from the study, it was found that 1987 did not exhibit more poverty than 1981 with the varying substitutability measures.

The World Bank (2004) has defined poverty as pronounced deprivation in well-being, comprising many dimensions. It includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity. Poverty also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice and insufficient capacity and opportunity to better one's life.

The European Commission (2004) claims that people are said to be living in poverty if their income and resources are so adequate as to preclude them from having a standard of living considered acceptable in the society in which they live. Because of their poverty, they may experience multiple disadvantages through unemployment, low income, poor housing, inadequate health care and barriers to lifelong learning, culture, sport and recreation.

Daimari & Mishra (2005) made a study to find out the extent of poverty and income inequality in the Udalguri sub-division, District: Darrang, Assam. They collected primary data from randomly chosen 182 households inhabiting seven sample villages in the Udalguri sub-divisions. As the data revealed, the mean household's income (annual) is Rs. 66.5 thousand. Of this about 50.71% contributed by the primary sector and about 40.6% was derived from the tertiary sector. The secondary sector contributed a meager 5.71% of the total. The study also revealed that there was an acute inequality in distribution of land holdings. Many farmers were sharecroppers cultivating on very small areas of land. The sharecroppers had to give a half of the produce raised on land to the owners of the land. On an average, it required 12 to 15 labour days to raise paddy on a bigha of land. The prevailing mean wage rate of hired labourer was Rs. 50 per day. Some 8 to 10 monds of paddy could be raised on a bigha of land. The findings of the study indicated an excessive degree of disguised unemployment in the rural economy of the sample villages. The study also indicated that at least 35.85% of the population in the sample villages was BPL. On the other hand, no more than 39.5% of the people were likely to stand under the poverty line. Among the villages, poverty was more widespread in Bhogdal Gaon and less acute in Nizdal Gaon. A perusal of consumption expenditure of the sample households revealed that on an average, the BPL households spend more than their income. Thus,

the study showed that income inequality was alarming and in the villages of Assam inequality was more prevalent than in India. However, the prime reasons of poverty in the study area were excessive dependence on primary sector, disguised unemployment, poor agricultural productivity etc.

The paper of *Mamun and others (2005)* drew on the identifiers of poverty relevant in local context of Bangladesh and map out the most representative ones using Guttman score. The methodologies and methods used in the study were strong in producing robust results and involved less ambiguity in measurement scale. A total of 19 fallible binary variables had been used, which were deemed likely to characterize rural poverty in Bangladesh. Among those, the surrogate classifiers came out from the study include inability to supply adequate food to family members, insufficient room height, less cloths, lack of protection against cold, etc. The methodology used in the study suggested that these were most matched characteristics of poor households, based on which they could identify a household as "poor." The study gave thought on how to identify most localised indicators of poverty in a particular geographic setting. This may help development practitioners address the outcomes of poverty with local solutions.

Fukuda-Parr Sakiko (2006) stated the concept of poverty as a human condition that reflected failures in many dimensions of human life – hunger, unemployment, homelessness, illness and health care, powerlessness and victimization, and social injustice; they all added up to an assault on human dignity. It was useful to have focused measures of critical areas of human wellbeing such as child mortality or access to clean water. But it was difficult to decide which one to use in making an overall assessment about whether poverty overall is improving or deteriorating. A composite measure therefore was needed to make this overall

assessment that could aggregate the different features of deprivation. The Human Development Reports (HDR) 1996 introduced the Human Poverty Index (HPI) to fill this gap. It is a composite measure set in the capability and human development space, drawing on the several important perspectives that have enriched our understanding of poverty. In this framework, poverty is the deprivation side of human development – the denial of basic choices and opportunities to lead a long, healthy, creative and free life; to enjoy a decent standard of living; and to participate in the life of the community including political freedom and cultural choices. HPI is a measure of capability deprivation. It aims to capture "human poverty". It focuses on three of the four key dimensions of HDI: the capability to (i) survive, (ii) be knowledgeable (iii) have access to private income as well as public provisioning.

Desai (2006) concentrated on the question of drawing up the poverty line, the absolute level of income or consumption below which people are said to be in poverty. He suggested a new measure whereby the two approaches, viz., the UNDP Human Poverty Index and a new method for determining the poverty line using utility theory as proposed by Nanak Kakwani. He defined poverty line as that level of expected income which allows the individual to consume enough food while maintaining his or her labour power intact. In particular, he said that enough food should be purchasable which would prevent any deterioration in health. The poverty level would then crucially depend on the availability of work and the wage rate. If the individual can not earn enough to be able to eat so as to prevent deterioration in health, and, in general, labour power, then he or she is poor.

Chambers (2006) outlined five clusters of meanings and reminds us of the importance of the analysis and views of poor people and their many meanings. The first cluster of meaning of poverty is income – poverty or its common proxy

consumption – poverty. The second is material lack or want. Besides income, this includes lack of or little wealth and lack or low quality of other assets, such as, shelter, clothing, furniture, and personal means of transport, radios or television and so on. A third cluster of meaning derives from Amartya Sen and is expressed as capability deprivation, referring to what we can or cannot do, can or cannot be. A fourth cluster is multidimensional view of deprivation, with material lack or want as only one of several mutually reinforcing dimensions. There is then a fifth cluster, which is the multiplicity of their meanings.

The paper of *Anderson et al.* (2006) used a detailed household survey data set to examine the determinants of income and poverty in Lao PDR. The results of the determinants of poverty in Lao PDR indicated that poor households were characterized by large household size, large dependency ration, low levels of human capital, simple technology, limited access to agricultural inputs, and unfavourable locational characteristics: less access to essential infrastructure, and limited access to health services. In many instances, poor households belonged to ethnic minority groups. These results provided policy makers with reasonably objective measures of the potential poverty reduction impacts that may be realized from well designed poverty alleviation programs. They suggested that it was possible to identify five principal elements or objectives of a poverty reduction strategy for Lao PDR. These included (1) reduced numbers of dependents in households, (2) investments in (female) education, (3) efforts to stimulate entrepreneurship and diversification of economic activity from agriculture to other sectors, (4) adoption of measures to raise agricultural productivity, and (5) improved infrastructure and health care.

Ravallion et al (2008) presented the first major update of the international "\$ 1 a day" poverty line. In a new data set of national poverty lines, they found that a marked economic gradient only emerges when consumption per person is above about \$200 a day at 2005 purchasing power parity (ppp). Below this, the average poverty line is \$1.25, which they proposed as the new international poverty line. Their proposed schedule of relative poverty lines is bounded below by \$1.25 and rises at a gradient of \$1 in \$3 when mean consumption is above \$200 a day.

Sen and Sharifa (2008) attempted to identify the extreme poor in rural Bangladesh by devising sensitive targeting indicators that are effective in minimizing leakage to the non-poor while ensuring broad coverage of the target group. They suggested that the indicators for targeting should not only be effective in minimizing leakage to the non-poor but also ensure broad coverage of the target group. The first aspect of this principle focuses on the sensitivity of the given indicator in identifying the target group, referred to as the targeting ability. The second aspect focuses on the representativeness issue, examining the effectiveness of the indicator in reaching the maximum numbers of the target group. After examining the suitability of various indicators, three criteria met the above two conditions of targeting. These were: land ownership, housing and occupation. Considered individually, however, each allows for some leakage, which can be avoided if these criteria are combined to identify the poorest of the poor. They derived a particular conclusion which relates to the intuitive observation that, since no single indicator, however efficient, contained sufficient information, it was better to combine those that were most informative. Following this approach, they suggested that the poorest of the poor in rural Bangladesh were likely to be agricultural labourers residing in jhupri or single structure thatch dwellings, owning 0.5 acres of land or less. However, even the most effective set of indicators could have little effect on the status of the extreme poor if the process of administering was left to the bureaucratic discretion of the programme

managers. This risk could be minimized through local consultation with communities and Non-Government Organizations (NGOs), a task that could be institutionally facilitated by the presence of effective local government. Given the relative absence of the latter, an 'intermediate' solution was advocated for the short to medium term. Food-For-Work (FFW) and Vulnerable Group Development (VGD) had successful track records of reaching the poorest, owing possibly to their country-wide coverage, a system of monitoring that provided buffers in times of severe economic stress and the use of the self-selection approach. Promoting a mechanism of information exchange between FFW, VGD and policymakers could help facilitate more socially equitable and inclusive pro-poor policies so that the extreme poor are not denied access to poverty alleviation interventions.

Sexena (2009), the chairman of expert group committee, proposed a new three step methodology for identifying BPL Households. His three step methods were: automatically include those that satisfy certain exclusion criteria; then automatically include those that satisfy certain inclusion criteria; and identify the rest of the BPL recipients using a 0-10 scoring method based on a weighted sum of key census questions. The committee recommended that the households which fulfill any one of the conditions would not be surveyed, i.e., automatically excluded for BPL status: (i) Families who own double the land of the district average of the agricultural land per agricultural household if partially or wholly irrigated; (ii) Families who have three or four wheeled motorized vehicles, such as, jeeps etc.; (iii) Families who have at least one mechanized farm equipment, such as, tractor, power tiller, harvester etc. (iv) Families who have any person who is drawing a salary of over Rs. 10,000 per month in non-government/ private organizations or is employed in government on a regular basis with pensionary or equivalent benefits. (v) Income tax payers. Whereas the following would be included in the BPL list : (i) Designated "Primitive Tribal Groups"; (ii) Single women headed household; (iii) Households with disabled person as bread-earner ; (iv) Household headed by a minor ; (v) Homeless households etc. The proposed scoring for the ranking on a scale of ten was as: (i) SC/ST:3 points, 'Most Backward Castes': 2 points, Muslim/OBC: 1 point ; (ii) Landless agricultural worker:4 points ; agricultural labourer: 3 points ; casual workers: 2 points (iii) No adult has studied up to class 5 in the household: 1 point; Any member of the household has TB, leprosy, disability, HIV AIDS: 1point ; (iv) Household headed by an old person of age 60 and above: 1 point. Those achieving highest marks would be included first, followed by the next high score and so on, till one reaches the number to be identified by the Panchayat.

Mehrotra & Mander (2009) proposed an alternative set of criteria and methodology for conducting the next census of the rural population to identify poor. The proposed criteria states that each household should be marked out of 100 and it is possible for highly poor families to be awarded more than 100 points on this scale. The proposal contains three parameters, viz., occupational categories, affirmative action categories and social categories. They listed their proposals separately for rural and urban areas. In order to identify poor in rural areas, they suggested that the households which fulfill any one of the following conditions would not be surveyed for BPL status, i.e., excluded (i) families which have two standard hectares of agricultural land or its equivalent plantation land ; (ii) families which have four-wheeled diesel and petrol vehicles (iii) families which have at least one running bore well ; (iv) any person in the family is drawing a salary of over Rs. 10,000 per month in government / non-government / private organizations and (v) income tax-payers. On the other hand, there are essentially three inclusion criteria, viz., (i) Workers in

low income yielding undignified, unsafe or highly vulnerable (to exogenous shocks) occupational categories, (ii) Households where the bread-earners' working (and earning) capacity is significantly compromised by mostly constraints over which they have no control, (iii) Households subjected to social exclusion on the basis of their ascribed status in historically disadvantaged groups, which they called for short affirmative action categories.

However, for urban areas, there should be three filters to identify the poor, the first being social vulnerability. The second filter should be occupational categories. The occupational categories for urban areas are – rag pickers, casual daily wage workers, rickshaw pullers, porters, construction workers, street vendors and hawkers, domestic help. The third filter relies upon place of residence which have three categories, viz., (i) shelter less; (ii) dwellers of unauthorized slums; (iii) dwellers of authorized slums and residents of resettlement colonies.

Gupta (2009) used the standard methodology developed by the World Bank team for analyzing poverty induced by out-of-pocket (OOP) expenses to estimate the likely increase in poverty. Data from the Consumer Expenditure Survey (CES) of the 61st round of the NSS was used to arrive at OOP health expenditures. Her analysis showed increases in poverty by as much as 3.6% and 2.9% for rural and urban India respectively, if OOP heath expenditures are accounted for. These estimates are higher compared to the estimated impact on poverty calculate from 55th round of the CES and NSS. The state-wise picture also indicated that most states will experience significantly higher poverty if OOP is taken into account. India currently has about 10% of its population covered by some form of health insurance. In the absence of health insurance, the effect of high OOP expenditure will clearly impact on poverty,

pushing especially those who are slightly above poverty line into poverty, and those already below poverty line, into further impoverishment.

Haughton and Khandker's book "The Handbook on Poverty and Inequality" (2009) provides tools to measure, describe, monitor, evaluate, and analyze poverty. It provides background materials for designing poverty reduction strategies. This book is intended for researchers and policy analysts involved in poverty research and policy making. The Handbook began as a series of notes to support training courses on poverty analysis and gradually grew into a 16-chapter book. The chapter 8 of this book summarizes some of the characteristics of the poor by region, community, household, and individual characteristics and then discusses how regression techniques can be used to determine the factors "causing" poverty. The results of the urban equation show that education is an important determinant of expenditure per capita. The coefficients for most of the educational variables are statistically significant and quite large; having an elementary education boosts income by approximately 38 percent relative to someone with no education. However, in rural areas education does not appear to explain expenditure per capita levels very well, a not uncommon finding. Conversely, the infrastructure variables have substantial predictive power: households located in villages that are nearer to both paved roads

Thorat (2010) examines to what extent some ethnic, religious and caste minorities suffer from chronic impoverishment, especially in rural India. He finds that poverty levels for members of various religious groups are not uniform in India and are seen to vary significantly across ethnic and caste based identities of group members. The reason for this poverty differential across social groups, within religious communities lies in the fact of the initial unequal and discriminatory access to skill and education and non-free occupational mobility. Finally, he concludes that

the Religious and social identity goes a long way in determining people's final level of well- being, at least in economic terms.

Dreze & Khera (2010) explored possible alternative to identify a poor household. They referred to these households as the "Social Assistance Base" (SAB) and avoided the BPL acronym as far as possible. SAB relies exclusively on basic exclusion and inclusion criteria. Under exclusion approach, all households are entitled to social support except if they meet pre-specified exclusion criteria. This can be described as a quasi – universal system. The pre-specified exclusion criteria have been included ownership of any of the baseline assets, like, cars, colour television, refrigerator etc.; ownership of any of the baseline assets or of a pucca house, ownership of any of the baseline assets or of at least three acres of irrigated equivalent land. Under inclusion criteria, all households belonging to pre-specified "priority groups" which constitutes households belonging to a SC or ST, landless household, household with no adult member educated beyond class V, household headed by single woman, agricultural labour household are entitled to social support. Then they combined exclusion and inclusion criteria for the purpose of constructing a single SAB lists. For this, there are four elementary ways, viz., exclusion approach, i.e., reject a household if and only if it meets any of the inclusion criteria; play-safe approach, i.e., reject a household only if it meets exclusion but not inclusion criteria and restrictive approach, i.e., select a household only if it meets inclusion criteria but not exclusion criteria.

Based on NFHS-3 (Rural India, 2005-06), they used these alternative approaches and found that under restrictive approach 65% of the rural households would included in the SAB list. However, in the play-safe approach, more than 90% of rural households were on the SAB list. By contrast, proportion of household with a

BPL card, 2005-06 was 32.9%. Finally, they concluded that it might well be possible to dispense with scoring methods and to replace them with simple combination of exclusion and inclusion criteria.

Roy (2011) aimed to understand the implications of implementing the Saxena Committee's recommendations in respect of identifying the poor in India. He conducted a survey which comprised 4520 households, covering nearly 21000 individuals in 18 rural wards of Bihar and West Bengal. The study revealed that in the West Bengal wards, 47% of the surveyed households was below the poverty line under this methodology -the "BPL 2002 Poor". In contrast, only 21% of the households in Bihar were BPL. On the other hand, 45% of the households in West Bengal were "BPL 2009 Poor", as against 62% of households in Bihar. The intersection of the two methodologies produced four groups of households. There were those who "remained on the poverty lists", i.e., these households were classified as poor by both the methodologies. The second group referred to those who "moved out of" poverty lists and the third comprised those that "moved into" poverty lists. Finally, there were those who "remained out of" poverty lists, i.e., they were considered non-poor by both methodologies. About 42% of the BPL 2002 Poor "moved out of the poverty lists" when the 2009 methodology was applied. Conversely, 39% of the BPL 2009 Poor moved into the poverty list. In Bihar, there was an absolute increase in the numbers of the poor under the 2009 methodology. However, in West Bengal, significant changes may be observed. Around 21% of the BPL 2002 Poor moved out of the poverty list, while 73% of the BPL 2009 Poor households moved into the poverty list. One of the more striking observations from the data on occupational groups was that more agricultural labourers were included in the ranks of the poor under the 2009 methodology than under the 2002 methodology.

In contrast, the 2009 methodology explicitly introduced an "affirmative action" bias. Not only that, it also weighed in favour of certain historically oppressed groups by recommending their automatic inclusion on the BPL list. The application of the 2009 methodology appeared to have benefitted (Scheduled Tribes) STs as the data from West Bengal indicated. On the other hand, the social group that perhaps most phenomenally benefitted from the application of the 2009 methodology was the Most Backward Classes (MBCs) in Bihar. However, the application of the two methodologies affected the prospects of inclusion of landless households in the BPL lists differently. In West Bengal, the number of landless households on the poverty lists actually reduced with the application of the 2009 methodology. In Bihar, nearly 15% of landowning families were mahadalit, which resulted in their automatic inclusion in the poverty lists. Over 95% of the remaining landowning families reported that they derived their household income from agricultural labour or from casual work in urban areas. Interestingly, only about 20% landless families "moving out of" the poverty list when the 2009 methodology was applied to the localities in Bihar, in sharp contrast with the West Bengal localities where as much as 45%households made a similar transition. Hence, Roy concluded that the application of the 2009 methodology in enumerating the poor households in rural India had tremendous significance. It excluded many households who had been protected by the social assistance net on account of being "below poverty line". At the same, it also added many households that had so far been deprived of their entitlements.

Hasim (2012), the chairman of the Expert Group, submitted the report regarding the identification of the BPL households in urban areas. He recommended that poverty in urban areas could be best captured by identifying three categories of vulnerabilities, i.e., residential vulnerability, occupational vulnerability and social

vulnerability that the urban poor were subjected to. Based on the above broad approach, the Expert Group recommended a three stage identification process (i) Automatic Exclusion which stated that if the number of dwelling rooms exclusively in possession of the household is 4 and above that household would be excluded. Secondly, the household possessing any one of the assets, i.e., four wheeler motorized vehicle, AC Set and Computer or Laptop with internet would also be excluded. Besides, the households possessing any three of these four assets, i.e., refrigerator, telephone, washing machine, two wheeler motorized vehicle would also be excluded. (ii) Automatic inclusion which mentioned that under residential vulnerability, if the household is 'houseless' or has a house with roof and wall made of plastic / polythene or wood and the material of roof being grass, thatch, bamboo, mud then that would be automatically included. Under occupational vulnerability, the household having no income from any source; any household member engaged in a vulnerable occupation like beggar/rag picker, domestic worker ; all earning member adult members in a household are daily wagers or irregular wagers, then that household should be automatically included. Under Social vulnerability, if there is child headed household and above all there is no able-bodied person aged between 18 and 60 years in the household or all earning adult members in a household are either disabled, chronically ill or aged more than 65 years, then that household should be automatically included. (iii) Finally, the remaining households would be assigned scores from 0 to 12 based on various indicators of residential, social and occupational vulnerabilities. Those household with scores from 1 to 12 are to be considered eligible for inclusion in the BPL List in the increasing order of the intensity of their deprivations meaning thereby that those with higher scores are more deprived.

Tendulkar (2012), the chairman of the Expert Committee, decided to move away from calorie anchor but test for the adequacy of actual food expenditure near to poverty line to ensure certain aggregate nutritional outcomes. He adopted the Mixed Reference Period (MRP) - based estimates of consumption expenditures as the basis of poverty lines. Under MRP, information on five broad item groups of household consumer expenditure with low frequency of purchase, viz., clothing, footwear, education, institutional medical care and durables is collected on a year-long recall basis while informations on consumption expenditure on all other items are collected on the basis of a month-long recall period. The committee did not discriminate between the rural and the urban population and recommend providing a uniform Poverty Line Basket (PLB) based in the latest available observed household consumption data to both the rural and the urban populations. Underlying consumption poverty line is the reference poverty line basket (PLB) of household consumption expenditure of the poor household goods and services consumed by those households at the borderline separating the poor from the non-poor. Consumption expenditure data, available once in five years from the NSSO, is used arrive at poverty figures in the absence of household income surveys. He estimates Rs.22.40 per day for poverty line for rural areas and Rs 28.60 line for urban areas.

Chandhoke (2012) argued that poverty is a violation of the fundamental axiom that human beings possess equal moral worth. So, all citizens have the right to basic goods on non-market principles, i.e., assurance of income, free education, subsidized or free food, free health, accommodation and political and civil rights, which will free them from poverty. More importantly, the right not to be poor should be enacted within a generalized moral consensus that persons who have been denied their rights should be given their due, that all persons are owed basic goods and that

the state should engage in additional measures to remedy harm done to the doubly disadvantaged.

Alkire & Seth (2012) had explored methodologies used to identify BPL households in India. They showed how to select a methodology to target multidimensionally poor households, and how to update that targeting exercise periodically. Using NFHS-3, they illustrated how a BPL targeting method using SECC variables may be calibrated to a multidimensional poverty. They also compared the fit between a benchmark measure of multidimensional poverty measure and several plausible targeting methods to determine which method approximate it most closely. They found a ten item binary scoring method which provides a strong proxy. They also illustrated how a particular targeting method can be justified, rather than to advocate any particular solution.

By implementing the various proposed criteria in so far as was possible using the same dataset, and comparing mismatches in the selected BPL households, they had shown that when between 75-83% of households were identified as BPL, the match index for Sexena (2009) appeared slightly larger than that for the 10-item binary scoring. However, they should note first that 1.6% less households is identified as multi-dimensionally (MD_A) poor than those identified as BPL by Sexena (2009) which increased the likelihood of larger share of BPL-poor being identified as MD_Apoor. Whereas 0.7% less households were identified as BPL than MD_A-poor by SECC 2011 increasing the likelihood of smaller fraction of BPL poor being identified as MD_A-poor. Secondly, the match index increases with an increase in the number of households identified as BPL and MD_A-poor. If the share of households identified as BPL by the SECC 2011 increases from 75.8% to 82.4%, the corresponding match index is expected to increase.

The study of Asogwa and others (2012) applied censored regression model approach to analyze the determinants of poverty severity among rural farmers in Nigeria using data from randomly sampled 233 rural farmers in Benue State. The study showed that 87.63% variation in poverty severity was explained by variations in the specified explanatory variables. Furthermore, at 5% level of significance, the critical determinants of poverty severity among the respondents were economic efficiency, household income, dependency ratio, ratio of food expenditure to total household expenditure, farm size, access to credit, household production enterprise structure, extent of household production diversification, extent of production commercialization, expenditure on education, access to agricultural extension services, membership of cooperative societies or other farmers' associations, market access, total value of household assets, household size and formal education. Measures that promote both household enterprise diversification and agricultural production commercialization are highly desirable. Measures should be put in place to encourage the formation of effective farmers' cooperatives and other farmers' organizations for the purpose of knowledge transfer, input and output marketing and distribution, savings mobilization, and farm credit sourcing and supply.

The study conducted by *Ministry of Housing and Urban Poverty Alleviation and Planning Commission (2012)* aimed at understanding the nature of poverty in Small and Medium Towns (SMTs) in India. The study also aimed to identify simple and visible indicators which are best related to household poverty deprivation to bring about the creation of more universally applicable indicators for a broader range of urban settlements. Six small and medium towns, viz., Parbhani (Maharastra), Bidar (Karnataka), Mansa (Punjab), Madhubani (Bihar), Jangaon (Andhra Pradesh) and Pakur (Jharkhand) have been selected. Questionnaires, Focus Group Discussions (FGD) and Poverty Ranking Exercises (PRE) have been employed in the study. A total of 2168 households were covered in the survey and the sample was drawn from only poor localities.

The study showed that across towns, about 60% of the household expenditure was on food items, 24% on non-food items and 16.3% on health and education. The state of housing in the selected SMTs was less precarious compared to larger cities. This was largely due to -- presence of tenure security, land prices and low growth of density and lack of or low density of infrastructure. Presence of kuccha roofs may be used as inclusion criteria, but presence of pucca roofs may not be used as exclusion criteria, as exclusion errors were likely to be large. Access to private water supply was largely considered as an indicator of being better off by communities, however, the use of private sources of water as exclusion criteria may entail large errors. Lack of electricity in the households could be used to identify the poorest of poor households. Households with bulbs / tube lights as the only electric gadgets could be identified as the poorest of poor. Households with a disabled member and female headed could be considered for greater inclusionary weight. However, household with no literate person could be considered for higher inclusionary weight. SCs and STs could be considered for greater inclusionary weight. Households with cobblers, beggars, ragpickers, unskilled casual wage labourers and rickshaw pullers could be automatically included with little error.

The study concluded that present targeting of poor for public distribution of food in SMTs was poor. Of the indicators assessed for their relation with per capita expenditure, no indicator was universal or extremely sensitive for identifying poor. Issues related with hidden poverty due to disbursement of benefits use of regional fuels and construction material; different valuations of materials across time and regions indicated the need for a regional approach to the identification of poor. It became imperative that some regional criteria should be included in the identification process to be able to address issues of relative and absolute poverty across towns and states.

Sharma (2012) explored the changing profile of urban poverty in the newly formed state Jharkhand since 1970's. He made an attempt to compare the poverty scenario in Jharkhand with its present state Bihar in four different periods like 1987-88, 1993-94, 1999-2000 and 2004-05 both before and after economic reforms periods. This study sought to provide an understanding of key concepts and issues pertaining to urban poverty, its causes and the changing nature of urban poverty in the era of liberalization. The findings of the study showed that not only do SC groups have a higher poverty rate than other social groups; the tribal groups in Jharkhand have the highest poverty intensity in India – higher that the ST groups in other Indian states. The process of liberalization and economic reforms in India has a mixed impact on the states especially on the mineral rich state of Jharkhand. Among the major challenges the on-going Naxalite problem puts an obstacle on the path towards development. The weak institutional mechanism and lack of effective governance has led to the underdevelopment and concentration of high poverty in India.

Alkire & Seth (2013) examined the Socio-Economic Caste Census (SECC) methodology and compares it empirically with alternative matters. They also pointed out how state level BPL poverty caps will vary if they reflect multiple deprivations such as malnutrition and housing rather than only expenditure based poverty rates. In order to identify the poor, they used both the exclusion and inclusion criteria and a scoring method. They used the third round of the National Family Health Survey

(NFHS-3) data set for 2005-06 and anthropometric data on under nutrition, child mortality, water, sanitation and other variables.

Their study showed that apparently small differences in scoring structures and inclusion or exclusion criteria make large differences in identifying BPL households. Using NFHS-3, they compare Sexena Committee recommendation and alternative method with the SECC 2011 BPL identification method. They find that when 55-58% of rural households are identified as BPL by each method, only 41.4% of households are identified as BPL by each method, only 41.4% of households are identified as BPL by all three methods and fully 31.8% are identified as BPL by some method but not by another. They also compare the set of households automatically excluded by the three sets of proposal exclusion criteria and find a wide mis-match.

Gangopadhyay & Singh (2013) showed that the poverty line in India was mainly associated with a calorie threshold. This calorie threshold approach suffered from many problems. For this, they adopted an alternative revealed preference-based approach which had been provided by Jensen and Miller. In the JM approach, the staple calorie share reveals whether a household is calorie deprived. They used the NSSO survey data from the 61st Round, conducted in 2004-05, to compare the extent of poverty estimated using the JM Method and other estimates, namely, the Tendulkar Committee numbers and the Planning Commission numbers based on the Lakadwala approach. They also presented the JM estimates of poverty using NSSO data from the 64th Round conducted in 2007-08. In the data, they had information about food items consumed by a household in the last 30 days preceding the date of survey along with demographic details of the household. They calculated the total amount of calories consumed by a household through different categories of food items, such as, cereals, milk, oil-spice-sugar, pulse vegetables, fruit-meat, etc. They considered cereals along

with cereal substitutes (Jackfruit) as the staple food to calculate staple calories for a household, which is the ratio of calories obtained from consumption of staple food and total calories consumed. Similarly, they could also calculate the milk calorie share, oil-spice-sugar calorie share, pulse-vegetable calorie share and fruit-meat calorie share.

In the JM methodology, they needed to plot the staple calories of a household against its income or wealth to determine the point of subsistence. NSSO surveys do not record the data on the income or wealth of a household. Therefore, they used household expenditure as a proxy for income. They examined the pattern in a plot of staple calories (scs) against household expenditure. In this plot, the point past which scs starts falling sharply indicated the point consumers substitute expensive calorie sources for staple food. This point could be seen as a partition between the poor and the non-poor. The household expenditure corresponding to this point was called the cut-off household expenditure. This cut-off value is the basis of poverty estimation under JM methodology. Once this point is identified, members of a household with household expenditure below this point are categorized as poor. However, they found that the extent of poverty in the rural sector was more controversial. The Planning Commission reported the head count ratio of rural poverty at 28.3%. The Tendulkar Committee estimated the rural poverty figures at 41.8. JM estimation of rural poverty was in between the values projected by the Tendulkar Committee and the Planning Commission.

Hou Hong Ng et al (2013) identifies corruption, education, political instability, geographical characteristics, and ineffective local governance and government policies as the causes of poverty. They stated that corruption in income inequality could be harmful to a country's growth, by adversely affecting the

economic growth, limiting poverty reduction and deterring investment into the country. Poverty is not only a problem of low incomes but it is a multidimensional problem that includes low access to opportunities for developing human capital and education. Due to the multidimensional problem, more attention needs to be focused on investment in human capital, particular in education as a means to increase earnings, quality of jobs and improving the quality of life such as better utilization of health facilities, shelter, water and sanitation. They found that households whose house was destroyed or who lost land encountered due political instability, wars etc a greater risk of falling into poverty. Many countries are inherently poor due to their geographic characteristics that predispose them to weak economic growth. The ineffective local governance and government policies seem to prevent the chronically poor from escaping the poverty trap.

Patnaik (2013) made a comparison of the consumption expenditure and associated nutritional intake data for 2009-10 with that of 2004-05 which showed worsening poverty in terms of the percentage of people unable to reach the minimum required calories energy intake through their monthly spending on all goods and services. His study showed that the percentage of rural persons unable to reach 2,200 calories energy intake, through their total monthly spending on all goods and services, had gone up from 69.5 to 75.5. Considering the urban population which was unable to reach 2,100 calories energy intake, the percentage rise was from 64.5 to 73. The below 2,400 calories percentage of persons had risen from 87 to 90.5 in rural India. The only positive aspect was that the ratio of rural persons below 1,800 calories intake had remained constant at 25%. He observed that the official poverty ratios revised by the Planning Commission, however, showed a decline from 41.5% to 33.8% in rural India and from 25.7% to 20.9% in urban areas over 2004-05 to 2009-

10. The decline claimed was a spurious one since the estimates were not comparable over time, with the later poverty lines providing access to successively lower levels of nutrition than each of the earlier ones.

Rangarajan C. (2014), the chairman of expert group committee, proposed that any household failing to meet certain level of minimum consumption expenditure could be treated as a poor household. He computed the average requirements of calories, proteins and fats based on ICMR norms differentiated by age, gender and activity for all-India rural and urban regions to derive the normative levels of nourishment. Accordingly, the energy requirement worked out to 2155 Kcal per person per day in rural areas and 2090 Kcal per person per day in urban areas. Thus, the new poverty line worked out monthly per capita consumption expenditure (MPCE) of Rs. 972 in rural areas and Rs. 1407 in urban areas. It also translated a monthly per household expenditure of Rs. 4860/- in rural India and Rs. 7035/- for urban India – assuming a family of 5 (five) members in each case.

Using the Modified Mixed Reference Period (MMRP) consumption expenditure data of the NSSO, Rangarajan Committee estimated that the 30.9% of the rural population and 26.4% of the urban population was below the poverty line in 2011-12. The all-India poverty ratio was 29.5%. However, the all India Poverty ratio fell from 38.2% in 2009 to 29.5% in 2011-12. Thus, the decline was a uniform 8.7% points over the two years.

The study of Siddiqui (2014) revealed that India had failed to succeed in curbing poverty and hunger conditions. He stated that all attempts to make Indian cities the generators of economic momentum were undermined by the extent of poverty. The main causes responsible for much higher incidence of urban poverty than rural poverty were: there was a lot of pull migration, as urban infrastructure

projects attracted cheaper labour from the countryside. The exceptions to this trend were Gujarat, and to a lesser extent, Punjab. However, both states had witnessed communal violence in the recent past, and this encouraged the flight of wealth from rural to urban areas, while discouraging poor migrants from other states to their cities. Both these states had also concentrated greater efforts on building urban infrastructure and services, thereby reducing the deprivation in their towns and cities. In MP, Chhattisgarh and Rajasthan despite low urbanization, the incidence of urban poverty outstrips the rural poverty. These states had high incidence poverty due to push migration as distress migrants from the countryside gathered there. Another serious aspect of this urbanization of poverty was the untrammeled growth of the urban informal sector. Siddique suggested three pronged approach to address the problem of urban poverty. These are: the tertiarisation of the local economy for towns with less than 1,00,000 population, the planning and strengthening of local economy for towns between 1,00,000 and 10,00,000, and the formalization of the urban informal economy in towns > 10,00,000 with revitalization of poor communities in dying metros like Mumbai. He, finally, concluded that given the thriving informal sector sub-economies of Indian metros, the urban poor are finding ways of their own to improve their life chances, without waiting for government hand-outs, schemes and plans. In Indian metros, at least, it is not merely the income dimension which now defines urban poverty, but the housing dimension. Therefore, it is essential to prepare detailed multi-dimensional city poverty profiles before formulating poverty alleviation strategies.

2.3. Research Gap:

From the above review of literature, it is quite clear that there is barely any study that has tried to evaluate the inclusion and exclusion errors in the identification of the poor in and around Assam following the Alkire-Foster multidimensional methodology. This creates a vacuum in the literature. From the review of literature it is observed that both the Government of India and the Government of Assam have introduced various developmental policies to improve the living condition of people of Assam but the benefits of these developmental policies do not reach to the actual target, i.e., poor households, due to wrong identification of the poor household. So, in the present study, it is tried to fill-up the gap by taking the case of Cachar, which is one of the backward districts of Southern Assam.

That is why, here, it is important to propose the hypothesis, like, there is a significant amount of inclusion and exclusion errors in the identification of the poor and all the causal factors have equal impacts on poverty identification. These hypotheses are needed to be dealt with effectively because proper identification of the poor will not only ensure the benefits of various social assistance schemes to the actual poor households but also rationalize the costs of various developmental policies. Hence, it is very crucial to investigate the inclusion errors, exclusion errors and causal factors of poverty identification and it is tried to be addressed in the present study.